

# EnerSolis Series Grid-Connected Single Phase

ES3000HC~ES4600HC



- Compact Size & Low Weight
- User Friendly LCD Display
- Uses High MTBF Component
- Convection Cooling (Fan-less)
- Intelligent DSP Controller
- Protection Class IP65
- Wide MPPT Range of 150 to 450 Vdc
- Intelligence MPPT Technology
- Anti-islanding Technology
- RS485 Communication
- De-rating Function
- High MPPT Tracker Efficiency
- Easy Installation

## Specifications

Model	ES3000HC	ES3680HC	ES4000HC	ES4600HC	
<b>Item</b>	Conversion Mode		Sine-wave, Current source, High frequency PWM		
	Inverter Technology		Transformer-less Design		
	Isolation Method				
<b>DC Input Data</b>	Nominal DC Voltage		370 VDC		
	Max. DC Input Voltage		500 VDC		
	Working Range		120VDC~500VDC*		
	Max. DC Input current	7.9 Amp	9.7Amp	10.5 Amp	12.1 Amp
	MPPT Range		150 VDC ~ 450 VDC		
	MPPT Tracker		2		
<b>Efficiency Data</b>	Max. Efficiency		>97.2%		
	Euro Efficiency		>96%		
	CEC efficiency		>96%		
<b>Environmental</b>	Operating Temperature		-25°C ~ +50°C / -13°F~122°F		
	Humidity		0 to 90%(Without condensation)		
	Altitude		0 ~ 2000 M / 0 ~ 6600 ft		
	Dimensions (WxHxD,mm/inch)		439x531x157 / 19.4x20.9x6.2		
<b>Mechanical</b>	Weight (kg/lbs)		20 / 44		
	Protection Class		IP65, outdoor		
	Cooling		Convection		
	AC Connection		Screw Terminals		
	DC Connection		MC4		
	Communication Interface		Standard : RS485 Optional: USB, Dry contact, WiFi, TCP/IP		
<b>Communication</b>	LCD		Boost input Voltage/Boost input Current/Boost input Power/AC output Voltage /AC output frequency/AC output current / AC output power/AC Energy yield/Inner Temperature/Heat sink Temperature /Status message/ Error message		
	LED		Leakage current fault or DC input isolation fault		
	Key Pad		Spec. of Utility is not matches with the Utility specifications of the inverter		
<b>Front Panel</b>	Utility		Solar Cell power is greater or smaller than sleep power		
	Protection		Over/under Voltage, Over/under Frequency, Ground fault, DC Isolation fault		
	Islanding operation detection		Passive : Voltage phase jump detection Active : Reactive power control		
	Over Temperature		Reduced output power		
<b>Certification</b>	On-Gird Performance		VDE0126-1-1/A1, VDE-AR-N 4105		
	Safty		IEC 62109-1, IEC 62109-2 , IEC 60730-1		
	EMI/EMC		EN 61000-6-2, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3, EN 61000-3-11, EN 61000-3-12		

\* Specifications subject to change without notice.

\*\* Depending on the model and voltage, please contact Ablerex for more information.

\*\*\* The same technical specification may be sold in different countries under different model names, please consult Ablerex for more information.

